Clean Air Act Task Force meeting on revised mercury rules June 5, 2003 - Madison, WI

Present: Jeff Schoepke, Wisconsin Manufacturers & Commerce; Ed Wilusz, Wisconsin Paper Council; Dave Hoopman, Wisconsin Federation of Cooperatives; Kathleen Standen, Wisconsin Energy Corp.; Michele Pluta, Alliant Energy; Tom Henning, Short Elliot Hendrickson, Inc.; Eric Uram and Caryl Terrell, Sierra Club; Marc Looze, Clean Wisconsin; Harold Frank and Eric Hennen, Dairyland Power Cooperative; Michael Ricciardi, Madison Gas & Electric; Ed Newman, Wisconsin Public Service Resources; Dawn Jensen, Vulcan Chemicals; Linda Bochert, Michael Best & Friedrich; Tina Ball, Xcel Energy; John Coleman, Great Lakes Indian Fish & Wildlife Commission; Marc Bentley, Bentley Government Associates; Dan Johnson, office of Sen. Neal Kedzie; Kendra Bonderud, Legislative Fiscal Bureau; John Stolzenberg, Legislative Council; Sally Jenkins and Ken Detmer, Wisconsin Public Service Commission; Hampton Rothwell and Tom Coogan, Wisconsin Dept. of Commerce; Cheryl Rezabek, Laurie Palchik and Neil Howell, WI Dept. of Administration; Greg Swanson, DNR Bureau of Communication & Education; Lloyd Eagan, Jon Heinrich; Tom Karman, Anne Bogar, Dan Rosenthal and Anne Urbanski, DNR Bureau of Air Management.

<u>Overheads/Handouts</u>: *Mercury rules review*; *Revised mercury rules summary table*; and *Mercury control and cost for major utilities - summary sheet*. All available on: http://www.dnr.state.wi.us/org/aw/air/reg/mercury/ruledev.htm

Discussion

LLOYD EAGAN – DNR will present revised mercury (Hg) rules to Natural Resources Board for adoption at June 2003 meeting. State's four largest utilities (WE Energies, Alliant, WPSC, and Dairyland) would be required to reduce Hg from coal fired boilers. Two-phase process resulting in 80% reduction by 2015. By 2015, it will result in 1 ton of Hg per year not being released. Why doing? Hg emissions from boilers are the largest human source in Wisconsin. Bacteria in water convert Hg into methylmercury, which bioaccumulates in larger organisms. Hg moves up through the food chain. Wisconsin has statewide fish consumption advisories due to level of Hg contamination in fish. Rules today were revised based on comments received from public hearings last fall. We worked with advisory group but were unable to achieve consensus on how to move forward. WDNR has made changes to incorporate many concerns of stakeholders. One change enables utilities to seek a waiver on emissions due to an emergency. DNR believes schedule is realistic and that the rule is necessary due to public health threat. A February 2003 EPA report says that 8% of women of childbearing age (about 1 in 12) have blood levels of Hg that could cause adverse developmental effects on fetuses. Public health professionals advocate for more action to reduce Hg emissions. Rule in response to citizen petition from wide variety of groups. Ultimately need action outside Wisconsin to manage Hg but do need action within state. States need to stimulate that action to get movement. DNR has given its best shot on this. Now it's up to NR Board to decide whether to move forward.

JON HEINRICH – will go through proposal step by step. Acknowledged Tom Karman, Dan Rosenthal and Anne Bogar for their work on rule development and public outreach. We're here to answer questions about language of rule, technical issues etc.

<u>Mercury Rules Review</u>. DNR has made changes in reduction requirements: revised schedule for making reductions, different starting point for getting reductions (looking more at Hg in fuel rather than stack reductions); trading provisions (no more open market trading scheme);

compliance determination (originally a mass balance approach); short-term reliability issues; control of new Hg emissions from new sources.

Overview of provisions – After public hearings we realized sources weren't using the same procedures for determining Hg emissions. So rule now includes provisions for determining Hg emissions – effective 1/1/2005. NR 446.03 looking for emission report by 10/1/2005 for 2002-03-04 emissions. Default baseline is arithmetic average of the three years. Source can request other baseline if those years are not representative. DNR will establish baselines by 1/1/2007.

➤ BOB FASSBENDER – To avoid companies being punished for dialing down? HEINRICH-Yes, we don't want to penalize actions to reduce emissions. Our intent is to provide an opportunity to request alternative years if default years are considered non-representative.

NR446.04 – how utilities are to collect and establish baseline information.

➤ ERIC URAM – what about renewable fuels, ash burning etc. DAN ROSENTHAL – rules require Hg determination from all fuels.

NR 446.05 – **Hg limits for new or modified sources**. Technology requirement for new or modified sources. Becomes effective 1 month after rule is promulgated. Establishes BACT for new or modified sources with allowable Hg emissions of 10 lb. or more. Does not apply to new or modified sources affected by s. 112 of federal Clean Air Act.

- ➤ ED NEWMAN what is BACT? HEINRICH same definition as in hazardous air pollutant rules (ch. NR 445). Not as stringent as LAER. Actually an emission limit based on nationwide review of appropriate technology. (Someone else): BACT for different coal types? HEINRICH good question really dealing with sources not covered under federal requirement. Mostly non-combustion sources. TOM KARMAN When BACT or MACT is being reviewed by DNR, DNR can take into consideration if sources demonstrate different control levels by fuel type.
- ➤ ED WILUSZ applies to all sources? Definition of source is unclear. Emissions unit? HEINRICH could be. Used same definition as in other regulatory requirements. Affects a single permitting action with 10 lb of allowable Hg emissions. So when permitting action results in 10 lb. or more.
- FASSBENDER significance of s. 112 CAA? HEINRICH if source is *not* regulated under s. 112, DNR rule would apply.

NR 446.06 – **mercury emissions limits for major utilities**. Cap comes online 1/1/08; by 1/1/2010 utilities must make 40% reduction from baseline (baseline testing done before 10/1/05); by 1/1/2015, they must make 80% reduction from baseline.

- ➤ JOHN COLEMAN (?) Page 4 of secretary's memo seems in conflict with this presentation? So is that incorrect? Talks about utilities only need to achieve 20-25% additional reduction. KARMAN They get credit for what mercury is being emitted based on existing control configuration. So memo was referencing incremental amount beyond. Newman are new units counted against baseline? NO. KEN DETMER cap is per plant not per utility? JON systems that the utilities operate now in 2002-04. EAGAN BACT applies to new units that have to meet federal responsibilities. John Coleman so radical change in how baseline is calculated (yes). So first reduction goal is lower (?) than original (?). HEINRICH different starting points. Asking for 80% reduction from 2700 lb. starting point. KARMAN if you want clarification, better to do that one on one.
- ➤ HAROLD FRANK- What about new units that aren't part of the current system or the utility's overall system? NEWMAN page 9 of rule, s. 446.05 says new mercury sources

- are exempt from requirements of this section Does DNR mean they are exempt from the rule? HEINRICH No, it means exempt from this section of NR 446.
- ➤ ERIC U what about units that come online after BACT but before (?) is established. HEINRICH actions covered before rule goes into effect are not covered. But this provision in the rules goes into effect 30 days after enacted.
- NR 446.07 Presents a multi-pollutant reduction alternative that must be requested at same time as the date of the initial compliance plan. The alternative must be requested by 10/2007. HEINRICH fairly flexible if people are addressing other contaminants besides Hg and go beyond requirements. Proposal must specific pollutants and reduction levels from 2010 2015.
- ➤ JOHN STOLZENBERG-- Does it include Green Tier? HEINRICH not clear how these rules will interact with Green Tier.
- **NR 446.08 Compliance and reporting requirements for major utilities**. The rule specifies system-wide compliance; trades among major utilities are allowed to achieve annual compliance. Compliance certification begins in 2009. In case of exceedance of annual limit, paragraph 5 of this section says you can true up the following year.
- ➤ URAM any transaction costs associated with trading to true-up? HEINRICH No. Determination of annual cimpliance includes records of fuel use, fuel mercury content and periodic emission testing.
- NR 446.10 variance for major utilities. Very similar to provisions in Wisconsin acid deposition laws. If need a variance, DNR must receive request for variance no later than date the compliance plan is due. May request alternative schedule etc. or both. Will also include public notice and public hearing opportunity.
- **NR 446.11 electrical supply reliability waiver**. For use in short term unavoidable events like anelectric fuel supply disruption etc. that results in annual limit exceedance.
- LINDA BOCHERT —emergency could come up any time of year. Why March 1? HEINRICH annual reporting date is 3/1. If you report it and want a waiver, that is when DNR wants to hear about it.
- NR 446.12 periodic evaluation and reporting to NR Board. Has to do with our understanding of mercury in environment and mercury control. Reports due by 1/1/2009 and 2013. Also within six months of a federal law or regulation (promulgated) that contains mercury reduction requirements. Citizen Advisory Committee considering making a report if a federal rule is proposed.
- ➤ STANDEN assessment of what federal rule might look like? HEINRICH We think federal MACT standard is not good for Wisconsin. Suppose EPA proposes MACT this year, promulgates in 2004, wants compliance by 2007 find it hard to believe can achieve significant Hg reductions in that time frame. We don't see how it can be done w/o concerns for reducing reliability. STANDEN control levels? HEINRICH- for sub-bituminous coal fired, MACT technology requirement would be between 30- and 85% reduction. Could be anywhere in between. Jeffords proposal seeks 90% by 2007- would not give us time frame to install control technology much less do massive fuel switch. KARMAN MACT is unit by unit requirement of 30-85%- Wisconsin rule is system wide average and other things can be done.

- FASSBENDER Not clear why MACT would be good. So DNR thinks MACT is not likely to hit target of 2007 whereas Wisconsin target is early in 2010. So your point is that MACT would apply, not that we can pick and choose. HEINRICH if MACT comes out and requires a 90% reduction, we fold our tent and go away. DNR is trying to make a statement in terms of what we think is appropriate for existing electric utililities in Wisconsin without disrupting electrical supply etc. Major utilities will have to look at reducing other contaminants to meet federal requirements. If MACT says 90% reductions by 2007, DNR's rule is not necessary. When MACT Workgroup evaluated best performing sources, for subbituminous coal they got a range of 30-85% depending on data analysis.
- ➤ SCHOPEKE So suppose it's 60% once MACT limit is out there, that's when DNR folds tent? Even if it's 30%? How could 80% be consistent with 50 or 60? ROSENTHAL –80% reduction is from the baseline of the coal; MACT standard might be from actual emissions.
- FASSBENDER So within 6 months of federal law DNR would have to do a report on reconciling state rule with federal rule.
- ➤ STANDEN Didn't see in rule a way to encourage, reward or provide incentives for early emission reductions. What about making reductions from 2005-10-- what is the incentive to do that? Any way to recognize those in compliance requirements? HEINRICH Not in rule. Did want to avoid penalties. We could not come upon a mechanism to recognize early reductions.
- NEWMAN Rule assigns emissions only to plants under your operational control, not your ownership. Is there anything in rule about allocating costs on jointly owned plants? HEINRICH -- No. Foundation of this section was how the Wisconsin acid deposition law handled joint ownership. Owners and operators need to work out shares. NEWMAN but that rule did not involve large capital investment, which Hg rule does. So if he were Alliant Energy, he would overcontrol on Columbia 4 and 2 and undercontrol at Edgewater.
- ➤ MICHELE PLUTA— Language is unclear because have joint ownership and operation. Understand intention. HEINRICH The rule as drafted reflects our legal counsel's advice. KARMAN basically same as in NOx rules; it's not DNR's position to decide who gets what costs it's up to utilities in their contracts to decide. Just as it's their responsibility to demonstrate compliance.
- ➤ COLEMAN What % of Hg is never emitted from coal when burned when there's no control? KARMAN Theoretically everything is emitted into air w/o existing particulate controls on plants. Maybe 1%-2% exists as particulate, which presumably goes into fly ash.
- ➤ FASSBENDER major stationary source is defined. Reporting requirement under NR 446.027 -? What's the question?
- ➤ PLUTA what is the intention of s. 446.027? HEINRICH- discovered people were not reporting Hg emissions accurately so it's important for people to have to follow some bare minimum reporting procedures. EAGAN Helps DNR know how much Hg is really out there.
- ➤ NEWMAN NR 446.05 What does "mercury ambient concentration limit" mean? HEINRICH This limit was first put in our regulations back in early 1980s. Just an ambient air quality standard associated with mercury. Measured where we would site any monitor off property where we would consider the high concentration. KARMAN NR 446 has been around a long time. HEINRICH originally the ambient air quality standard was an inhalation standard.
- ➤ TINA BALL Under s. 446.027 assumes reporting will be done with annual emissions inventory on March 1? Yes.

- ➤ PLUTA what about mercury in fuel oil? KARMAN oil and other fuels addressed in procedures. If it's not a coal solid fossil fuels, other non-solid fossil fuels need to be tested once and quantify how much mercury is associated with it.
- > SALLY JENKINS -Do you have to report again if you change fuels? KARMAN No, the rule is constructed so your baseline is determined off those fuels, using those years. So if you use a different fuel and don't have Hg concentration data for it, you have to obtain data or do testing.

EAGAN – don't have another session planned on mercury- do have another planned on ozone designations, on Wednesday, June 18. Thanks to DNR staff who did a huge amount of work on this rule, Jon Heinrich, Tom Karman, Anne Bogar, Marty Burkholder, Dan Rosenthal and Tom Steidl. We also appreciate external people who've contributed to this rule who really put a lot of effort in rule, through the TAG or CAC.

C:/data/msword97/taskforce/tf030605Hgsummary.doc

Prepared by Anne Urbanski